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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-11.   (Canceled)

12.   (Original) A method for supplying an electronic document based on XML using a syntax defining a structure of the electronic document, the method, comprising:

supplying a document including an invalid element to delete subsequently invalid contents contained in a corresponding previously supplied document, wherein deletion of predetermined contents of the corresponding document is notified by adding to-be-deleted contents to the invalid element.

13.   (Original) The method of claim 12, wherein the to-be-deleted contents contained as contents of the invalid element within the supplied document is an identifier element, and wherein when the identifier element is supplied as the contents of the invalid element, the corresponding entire document is deleted.

14.   (Original) The method of claim 12, wherein when an identifier identifying the corresponding document within the supplied document is contained and only the to-be-deleted contents

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of the corresponding document are contained as the invalid element, only the corresponding contents contained in the invalid element are deleted.

15.   (Original) The method of claim 12, wherein the to-be-deleted contents are identified by the invalid element.

16-19. Canceled

20.   (New) A method for updating contents of an electronic document based on XML describing a broadcasting program, wherein a prescribed content is stored in a client, the method comprising:

   requesting an updated version of said prescribed content to a provider;

   receiving an invalid element notifying at least one version of said prescribed content before said requested updated version of said prescribed content is an invalid content, wherein said prescribed content is identified by content version numbers; and

   deleting said prescribed content notified as said invalid content from said client.

21.   (New) The method of claim 20, wherein said prescribed content is a fragment describing metadata.

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22.   (New) A method for updating an electronic document based on XML, wherein said electronic document is a fragment describing metadata for a television broadcasting program that is stored in a client, the method comprising:

    requesting an updated version of said fragment to a provider;

    receiving an invalid element notifying a version of said fragment before said requested version as an invalid fragment, wherein said fragment is identified by at least one member chosen from the group of a fragment identification and a fragment version; and

    deleting said fragment notified as said received invalid fragment from said client.

23.   (New) The method of claim 22, wherein said fragment is previously received and stored in said client.

24.   (New) The method of claim 22, wherein said invalid fragment and said invalid element are defined by a syntax defining a structure of an electronic document, and wherein said syntax is XML schema.

25.   (New) The method of claim 22, wherein said deleting includes identifying said fragment identified by said fragment identification from said client.

26.   (New) The method of claim 22, wherein said fragment can be notified as said invalid fragment by an invalid attribute.

27.   (New) The method of claim 26, wherein said invalid attribute is defined by a syntax defining a structure of said electronic document, wherein said syntax is XML schema.

28.   (New) A method for updating a fragment based on XML, wherein said fragment stored in a client describes metadata related on a broadcasting program, the method comprising:

requesting a updated version for said fragment to a provider; and

deleting said fragment from said client when said fragment is notified as invalid element by said provider, wherein said fragment is identified by a fragment identification or a fragment version.

29.   (New) The method of claim 28, wherein said fragment is previously received and stored in said client.

30.   (New) The method of claim 28, wherein said invalid fragment and said invalid element are defined by a syntax defining a structure of an electronic document.

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31.   (New) The method of claim 30, wherein said syntax is XML schema, and wherein the broadcasting program is a television broadcasting program.

32.   (New) The method of claim 28, wherein said deleting step includes identifying said fragment identified by said fragment identification from said client.

33.   (New) The method of claim 28, wherein said fragment can be notified as said invalid fragment by an invalid attribute.

34.   (New) The method of claim 33, wherein said invalid attribute is defined by a syntax defining a structure of an electronic document.

35.   (New) The method of claim 34, wherein said syntax is XML schema.

36.   (New) A method for updating a fragment based on XML describing metadata related on a broadcasting program, wherein said fragment is stored in a client, the method comprising:

   receiving a request for an updated version of said fragment from said client; and

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supplying said client with an invalid element notifying said fragment as an invalid fragment, wherein said fragment is identified by at least one member chosen from an fragment identification and an fragment version.

37.   (New) The method of claim 36, wherein said fragment is previously supplied.

38.   (New) The method of claim 36, wherein said invalid element and said invalid fragment are defined by a syntax defining a structure of an electronic document.

39.   (New) The method of claim 38, wherein said syntax is XML schema.

40.   (New) The method of claim 36, wherein said fragment can be notified as said invalid fragment by an invalid attribute.

41.   (New) The method of claim 40, wherein said invalid attribute is defined by a syntax defining a structure of an electronic document.

42.   (New) The method of claim 41, wherein said syntax is XML schema.

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43.   (New) A method for updating fragment stored in a client describing metadata related on a television broadcasting program, wherein said fragment is based on XML, the method comprising:

identifying a predetermined version of said fragment as an invalid fragment;

receiving a request for an updated version of said fragment from said client, wherein said predetermined version of said fragment is before said requested updated version of said fragment; and

supplying said client with an invalid element notifying said predetermined version of said fragment as an invalid fragment, wherein said fragment is identified by a fragment identification or an fragment version.

44.   (New) The method of claim 43, wherein said fragment is previously supplied.

45.   (New) The method of claim 43, wherein said invalid element and said invalid fragment are defined by a syntax defining a structure of an electronic document.

46.   (New) The method of claim 45, wherein syntax is XML schema.

47.   (New) The method of claim 43, wherein said fragment can be notified as said invalid fragment by an invalid attribute.

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48.   (New) The method of claim 47, wherein said invalid attribute is defined by a syntax defining a structure of an electronic document.

49.   (New) The method of claim 48, wherein said syntax is XML schema.

50.   (New) A method for processing a response to a request for updating a fragment based on XML describing metadata related on a broadcasting program, wherein said fragment is stored in a client, the method comprising:

        receiving an invalid element to delete said fragment identified by a fragment identification from a provider, wherein said invalid element notifies said fragment is an invalid fragment;

        identifying said fragment identified by said fragment identification from said client; and

        controlling to delete said identified fragment from said client in accordance with said received invalid fragment.

51.   (New) The method of claim 50, wherein said fragment is previously received and stored in said client.

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52.   (New) The method of claim 50, wherein said invalid element is defined by a syntax defining a structure of an electronic document.

53.   (New) The method of claim 52, wherein said syntax is XML schema, and wherein the broadcasting program is a television broadcasting program..

54.   (New) The method of claim 50, wherein said fragment can be notified as invalid fragment by an invalid attribute.

55.   (New) The method of claim 54, wherein said invalid attribute is defined by a syntax defining a structure of an electronic document.

56.   (New) The method of claim 55, wherein said syntax is XML schema.

57.   (New) A method for replying to a request for updating a fragment stored in a client describing metadata related on a broadcasting program, wherein said fragment is based on XML, the method comprising:

supplying said client with an invalid element to delete said fragment identified by a fragment identification, wherein said invalid element notifies said fragment is an invalid fragment.

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58.   (New) The method of claim 57, wherein said fragment is previously received and stored in said client.

59.   (New) The method of claim 57, wherein said invalid fragment and said invalid element are defined by a syntax defining a structure of an electronic document.

60.   (New) The method of claim 59, wherein said syntax is XML schema.

61.   (New) The method of claim 57, wherein said fragment can be notified as said invalid fragment by an invalid attribute.

62.   (New) The method of claim 61, wherein said invalid attribute is defined by a syntax defining a structure of an electronic document.

63.   (New) The method of claim 62, wherein said syntax is XML schema.

64.   (New) A method for processing a response of an invalid element notifying a fragment stored in a client is an invalid fragment responsive to a request for updating said fragment, wherein said fragment is based on XML and describes metadata for a television broadcasting program, the method comprising:

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identifying said fragment using fragment identification from said client; and

controlling to delete said identified fragment from said client in accordance with said received invalid fragment.

65.   (New) The method of claim 64, wherein said fragment is previously received and stored in said client.

66.   (New) The method of claim 64, wherein said invalid element is defined by a syntax defining a structure of an electronic document.

67.   (New) The method of claim 66, wherein said syntax is XML schema.

68.   (New) The method of claim 64, wherein said fragment can be notified as said invalid fragment by an invalid attribute.

69.   (New) The method of claim 68, wherein said invalid attribute is defined by a syntax defining a structure of an electronic document.

70.   (New) The method of claim 69, wherein said syntax is XML schema.

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